

ON A COLLECTION OF PARASITIC HYMENOPTERA
(CHIEFLY BRED), MADE BY MR. W. W. FROGGATT,
F.L.S., IN NEW SOUTH WALES, WITH DESCRIPTIONS
OF NEW GENERA AND SPECIES. PART II.

BY P. CAMERON.

(Communicated by W. W. Froggatt.)

CHALCIDIDÆ.

Chalcidinae.

CHALCIS FROGGATTI, n.sp.

Black; anterior tibiæ in front, and their base and apex behind, middle knees and tarsi testaceous; hind femora behind and the upper two-thirds, basal third and apical third of tibiæ red; hind tarsi paler than the others; hind femora closely punctured, their teeth numerous, closely pressed together; wings hyaline, the nervures black. Length, 4 mm.

Kenthurst, N.S.W.; in August (W. W. Froggatt).

Head umbilically punctate, more coarsely above than along the sides of front. Pro- and mesonotum umbilically punctate, scutellum more coarsely than mesonotum; metanotum coarsely, irregularly reticulated, the sides broadly rounded. Upper part of propleuræ roundly convex, transversely aciculated, bordered at base by a broadly rounded, curved furrow, widest below. Mesopleuræ bordered by a row of large, round foveæ, upper part smooth on basal half, apical weakly striated, this part projecting below the basal; the part under the latter covered with round deep punctures, base of apical punctured below, like the basal part but more sparsely. Metapleuræ coarsely reticulated.

CHALCIS EUPLÆE Hope.

An Indo-Malayan species of wide range. Bred from *Antheraea simplex*; Richmond River, N.S.W. (W. W. Froggatt).

CHALCIS POMONÆ, sp.n.

Black; head and thorax densely covered with short, white pubescence, abdominal segments on the sides fringed with long, white hair; tegulæ, apex of four front femora and base of their tibiæ narrowly, apex of tibiæ more broadly, apex of hind femora, base and apex of tibiæ (about one-third), central black part a little longer than the coloured base and apex, which are of equal length, and tarsi, white; femoral teeth short, blunt, the basal larger than the others; there are about ten teeth, covered with white pubescence; wings hyaline, the nervures black. Length, 7 mm.

Bred by Mr. W. B. Stokes, at Glen Innes, from the Codling Moth (*Carpocapsa pomonella*), the imported moth so destructive to apples.

Closely, rather strongly, umbilically punctate; puncturation on central lobe of mesonotum stronger than on lateral, on scutellum still stronger; the apex of the latter projecting and transverse; metanotum irregularly, coarsely reticulated; the central basal area somewhat semicircular, bounded by a small square one on either side, the outer area much larger, transverse, its apex broadly projecting in the middle; base bordered by a row of small areæ, longer than wide, and of equal width; sides broadly rounded. Abdomen smooth, shining, longer than head and thorax united, gradually narrowing from the second segment to the apex.

This is not a typical *Chalcis*; the apex of the scutellum is transverse and the abdomen longer and more distinctly narrowed than e.g. in *C. euplææ*. Its precise generic location may be left over until the male has been discovered. The abdomen shows an approach to *Conura* and *Phasgonophora*.

IRICHOHALTICELLA, gen.nov.

Abdomen sessile, basal segment nearly as long as the following segments united, closely, strongly, uniformly, longitudinally striated, except on the outer edge, which is smooth and clearly separated; it is longer than it is wide at the apex, which is broadly rounded outwardly; the second is, from the form of the

first, much longer laterally than in the centre, where it is about one-fourth of the length of the first; its apex is not quite transverse. Antennæ placed over the mouth, 10-jointed, the joints elongate. Hind femora closely toothed, the apical tooth larger than the others. Apex of scutellum bluntly rounded. Metanotum flat, bearing three keels on either side, three being connected by finer transverse striæ; outer keel stouter than the others and slightly projecting. Apex almost transverse above and at the top, pressing against the broad base of the first abdominal segment. Submarginal nervure nearly one-half the length of the rest of the wing; submarginal not one-fourth of its length, stigma short, hardly projecting beyond the latter; postmarginal hardly differentiated. Malar space as long as the eyes. Body and legs more densely pilose than usual. Middle legs much narrowed on the basal half.

A genus of *Halticellinæ*, easily known by the peculiar form of the first abdominal segment.

IRICHOHALTICELLA PILOSELLA, sp.n.

Black; densely covered with white pubescence; the apical third of the four anterior femora, the whole of the posterior, and all the tibiæ and tarsi red; wings hyaline, nervures black, tegulæ black, broadly red on the outer edge. Length, 5 mm.

Mittagong, N.S.W.; caught on the wing (W. W. Froggatt).

Antennæ opaque, bare, third joint about one-quarter longer than fourth, the last longer than the penultimate. Sides of front and occiput coarsely, umbilically punctate, the lower part of front with the sculpture hidden by the dense pubescence, the middle coarsely transversely striated. Temples less strongly umbilically punctate. Pro- and mesonotum, except laterally, and scutellum coarsely umbilically punctate, lateral lobe of mesonotum with the central apical half smooth, the rest with large, distinctly separated punctures. Base of metanotum, under the projecting apex of the scutellum, with a crenulated furrow; the two outer longitudinal areae wider than the central, and having the longitudinal and transverse keels stronger than the central. Upper half of propleuræ umbilically punctate, clearly separated from the lower,

which is smooth, has a stout keel down its base, but not on the basal edge; it has two longitudinal upper and lower keels. There are two rows of punctures on the apices of the third and fourth abdominal segments, the others being opaque, and finely rugose.

ANTHROCEPHALUS MARGINICEPS, sp.n.

Black; the four anterior knees and tarsi rufo-testaceous; wings hyaline, the apical half tinged, slightly, but distinctly with fuscous, the nervures black; face, outer orbits, apex of mesopleuræ, metapleuræ and the sides of the apical abdominal segments densely covered with long silvery pubescence, the rest of the body with the silvery pile shorter and sparser, except on the mesonotum, where it is short and black; legs covered with white pubescence, which is dense, especially on the femora and tibiæ. The last abdominal segment and the sheath of the ovipositor covered densely with a short white pile. ♂♀. Length, 5 mm.

Mittagong, N.S.W.; in January; caught on the wing (W. W. Froggatt).

Antennæ longish, of uniform thickness. Frontal depression finely, closely transversely, regularly striated to the anterior ocellus, which is placed inside it in a smooth shining space; it is bordered by a stout keel, the space between which and the eyes is regularly, rather closely, and strongly striated. Occiput closely, almost transversely, not very strongly rugosely punctured, the punctures on the top larger, and more distinctly separated. Pro- and mesonotum, and scutellum moderately strongly punctured, the punctures on the mesonotum more widely separated. Metanotum bordered by a stout keel, commencing at the outer basal part, where it is roundly dilated, forming almost an oblique semicircle from which it runs obliquely to the lower central part, forming a triangular area; the keel has two outward projections inside it. In the narrowed basal part, are some oblique striæ, the innermost larger and rounded inwardly; on the base is a crenulated furrow; the area is bare, but it is fringed densely by long silvery hair. Pleuræ strongly punctured, the depressed basal part of the mesopleuræ bare, shining, strongly striated, the striæ clearly separated, the central more irregularly sloped than the others. Seen from the top, the metanotum, on the outer

edge, is trilobate, the central lobe larger and more rounded. Apex of fifth tarsal joint of hind legs and claws, except at apex, rufous.

ANTHROCEPHALUS ERYTHROGASTER, sp.n.

Black; antennæ, tegulæ, legs and abdomen, except the back, and ovipositor, red, antennæ of a paler red colour; wings hyaline, nervures black. Frontal depression closely, regularly, not very strongly striated, separated from the anterior ocellus by a smooth, slightly curved, flat keel; it is separated from the eyes by a broad band which, on the inner side, bears three rows of punctures below, two above; the innerside is obliquely depressed towards the eyes, and has two rows. Thorax on the pro and mesonotum and scutellum closely, regularly, not very strongly punctured; apex of scutellum margined, the centre with the keel stronger and depressed in the middle, forming two slight lobes narrowed inwardly. The centre of the metanotum has, on either side, a stout keel, which runs from the outer basal part to the inner central, the two forming a large triangular area. ♀. Length, 5 mm.

Glen Innes, N.S.W.; bred by Mr. W. B. Stokes, in January, from "Codling Moth."

Closely, almost uniformly, not very strongly punctured. The narrowed, apical part of the scutellum margined, furrowed on the inner side, the centre of the apex broadly bilobate, the lobes not prominent. The depressed part of the mesonotum striated, the striæ moderately strong, more or less curved, bordered at the base and apex by a smooth margin. Abdomen as long as thorax, the terminal sheath short, broad, blunt at the apex. The end-joints of the antennæ are marked with black. Hind-femora finely, closely, distinctly and uniformly punctured; below they are margined by white pubescence.

ANTHROCEPHALUS CARPOCAPSÆ, sp.n.

Black; flagellum of antennæ, tegulæ and legs red, tibiæ darker in tint than the femora; wings hyaline, nervures black; a fuscous cloud at and behind the stigma, not extending much beyond the

nervures; beyond is a larger, paler, longish-triangular cloud, the narrowed end at the costa, it extending beyond the middle. Basal four ventral segments piceous-red. Frontal depression deep, faintly striated, the sides transversely striated, with two longitudinal keels, the inner stronger and longer than the other, it going round the sides and top of the lower ocellus; opposite the latter, it forms a flat, smooth, shining keel on which are three foveæ. Pro- and mesonotum closely, distinctly punctured, the former more finely and closely than the latter, scutellum slightly more strongly than the mesonotum, its apex depressed in the middle, the sides bluntly rounded. Metanotum with a slightly oblique, straight slope; in the centre are two keels, which slightly converge at the base, the space between them irregularly striated; the part on either side of this is reticulated, widely at the base, more finely and closely at the apex, the part becoming gradually narrowed towards the apex. Abdomen as long as the thorax, becoming gradually narrowed towards the apex. ♀. Length, 4 mm.

Bred from "Codling Moth" (*Carpocapsa pomonella*), by Mr. W. B. Stokes, at Glen Innes.

ANTHROCEPHALUS SPILOGASTER, sp.n.

Black; the basal two abdominal segments, upper half of third, on the sides, and hind coxæ, trochanters, and femora red; wings hyaline, the middle of the wings fuscous, slightly violaceous, the cloud fainter beyond the stigma, which is black like the nervures; the four anterior tarsi are rufo-testaceous except at the base. ♀. Length, 6 mm.

Bong Bong, N.S.W. (W. W. Froggatt).

Temples, pleuræ, metanotum, and apices of abdominal segments densely covered with long, white pubescence; mesonotum and scutellum densely with shorter black pubescence; the pubescence on the tibiæ short, white and dense. Frontal depression closely, regularly, transversely striated in the centre; sides transversely striated, with a keel on either side, and one down the centre. Malar space as long as the eyes. Apex of scutellum roundly, broadly incised, the lateral edges bluntly rounded. Thorax

strongly punctured, the punctures on the mesonotum and scutellum clearly separated. Mesopleuræ, except at the base, closely, regularly, longitudinally striated, the striæ becoming shorter below. Metapleuræ closely, rugosely reticulated, armed with a stout tooth, which is longer than wide at the base. Abdomen nearly as long as head and thorax combined.

ANACRYPTUS FERRUGINEUS, sp.n.

Ferruginous; antennæ lighter in tint; mesonotum, scutellum, mesosternum, and the dilated apical part of the abdomen infuscated, the two hinder legs darker in tint than the four anterior; abdominal petiole fully one-half the length of the thorax, and longer than the rest of the segments united; wings hyaline, very iridescent, nervures black. ♂. Length, 5 mm.

Mittagong, N.S.W.; in January; caught on the wing (W. W. Froggatt).

Head and thorax strongly, umbilically punctate, less strongly and more sparsely on the sides of the vertex and in the middle of the occiput, lateral lobes of mesonotum less strongly and more sparsely than the middle one; scutellum as strongly, but not so closely, its apex broadly rounded, and with a distinct margin. Propleuræ with two punctures above and two below. Mesopleuræ, at the top apical part, with a squarish, smooth space, having one fovea in the middle of the base and three below; apical basal part closely, finely, longitudinally striated, more strongly and less closely at the top; the rest is strongly punctured, with the punctures clearly separated. Metanotum strongly aciculated, with two keels slightly diverging at the apex, in the centre. Metapleuræ regularly reticulated. Abdominal petiole aciculated, more strongly at the base than apex, its sides margined, weakly so on apical half, the sides with two stout keels, and an irregular one on basal half between them.

CHALCITELLA PICEIVENTRIS, sp.n.

Black; antennal scape and four front legs rufo-testaceous, hind legs and tegulæ of a deeper, darker rufous colour, the middle of the femora broadly black, sides and ventral surface of

the dilated abdominal segments piceous-red; wings hyaline, iridescent, nervures pale testaceous, costal nervures paler at the apex. ♂. Length, 3 mm.

Mittagong; in January; caught on the wing (W. W. Froggatt).

Vertex weakly punctured laterally, the centre smooth, sides of the front more strongly punctured, occiput smooth and shining. Pro- and mesonotum and scutellum strongly punctured, apex of mesonotum smooth at the sides. The flat metanotum is strongly aciculated; there are two keels, not very clearly defined, down the middle; on either side are two pairs of not very clearly defined, oblique keels. Pro- and mesopleuræ irregularly punctured, the apical upper third of the latter smooth, the lower part finely, closely striated. Metapleuræ regularly reticulated. Abdominal petiole one-half the length of thorax, and longer than the rest of the abdomen. There are two keels on the top, and a stout one down the middle of the sides. There are eight black teeth on the hind femora, the four basal larger and more widely separated than the apical.

Toryminæ.

CALLIMONE ACACIÆ, sp.n.

Green; thorax tinged with blue, face and malar space tinged with golden, antennal scape green, flagellum black; trochanters, base and apex of femora narrowly, and tibiæ and tarsi, yellow, almost white; wings hyaline, nervures black. ♂♀. Length, 2 mm.; terebra, 1.5 mm.

Erina, N.S.W.; bred from small, berry-like galls on the foliage of *Acacia* sp.; 28th August (W. W. Froggatt).

Face strongly punctured, more weakly above than below, and more sparsely in the middle above; a keel runs down its middle from the antennæ, it becoming widened below. Vertex and front sparsely punctured, their sides transversely striated, the latter more strongly than the former; the space below the ocelli aciculated only. Mesonotum finely, closely transversely striated. Base of scutellum transversely, the sides finely and closely longitudinally striated, the apex in

the middle more finely transversely striated. Base of metanotum with a crenulated furrow, centre almost smooth, sides with some oblique striæ. The top of propleuræ with a few oblique stout striæ running from the base to the apex, the rest more finely and closely striated, the striæ running from the apex to the base. Upper basal half of mesopleuræ finely striated, the striæ more or less curved. Metapleuræ smooth, the lower half depressed, rounded above, the sides margined. Abdomen smooth above, the sides finely, closely, obliquely striated. Legs closely covered with white pubescence; hinder coxæ closely, finely reticulated; hinder femora finely punctured.

MEGASTIGMUS SULCICOLLIS, sp.n.

Yellow; mesonotum, scutellum, and abdomen tinged with fulvous, legs of a paler yellow colour; flagellum of antennæ darker, more fulvous in tint, the apices of the joints narrowly black; wings hyaline, nervures testaceous, stigmal spot longish-conical. Tips of mandibles and sheath of ovipositor black. ♀.Length, 1.2.5mm.; ovipositor as long as the body.

Richmond, N.S.W.: bred from galls in the flowers of the "Kurrajong," in August (specimens from C. T. Musson).

Smooth, pronotum finely, closely, transversely striated; a narrow transverse furrow before the middle, a shorter, wider, more distinct one at the apex. Pro- and mesonotum, and scutellum sparsely covered with longish black hairs; finely, closely, transversely striated, metanotum more coarsely striated. Base of mesonotum, base and sides of scutellum and of metanotum, the sides of the latter more broadly, base of the parapsidal furrows, and the depressions at the sides of the mesonotum, black.

POLMON OLENUS Walk.

Mon. Chal. ii., 7.

Sydney; in February; bred from egg-cases of Mantis: Cooma, N.S.W.(W. W. Froggatt).

PODAGRION SPILOPTERION, sp.n.

Dark blue; abdomen dark violaceous, hind tibiæ and femora black, tarsi testaceous, antennal scape fulvous; wings hyaline, nervures black, a large blackish-violaceous cloud on the marginal nervure, commencing near its base and reaching to near the apex, enclosing the stigmal nervure, becoming slightly, gradually widened to shortly beyond the middle, then roundly narrowed, the sides at the apex rounded, the centre transverse; it extends to the top of the apical third; ♂ ♀. Length, 3 mm.; ovipositor, 2 mm.

Cooma, N.S.W.; bred from egg-cases of Mantis (W. W. Froggatt).

Face closely, finely punctured, intermixed with fine striæ; the blue colour intermixed with brassy and rosy tints, especially below. Front and vertex more strongly punctured; the punctures close and regular. Mandibles darker red, brighter in tint at the base. Pro- and mesonotum, and scutellum closely punctured; the scutellum with more distinct brassy tints; upper part of basal mesopleuræ strongly, obliquely striated, it forming a triangle, bordered below by a keel; the rest of it closely, finely reticulated. Propleuræ closely, finely punctured, more or less striated. Metapleuræ finely, closely, punctured; there are about six irregular teeth, the basal three larger and more widely separated; they are as long as the coxæ, which are closely and more finely punctured than the femora.

The male is similar. As is usual with metallic species, the amount of the brassy and rufous tints varies. The fore tibiæ may be testaceous at the base and apex, as well as below.

Probably the femoral teeth vary in size and number, as I have noticed to be the case with another species. The apical joints of the antennæ form a not very clearly defined club. The sides of the metanotum are bounded by a smooth furrow, inside of which is a flatter one, double its width, which,

again, is bordered on the inner side by an irregularly crenulated furrow. The central part is finely rugose, divided into two almost equal parts by a narrow smooth furrow; the apical part is depressed in the middle.

Except for the large alar cloud, this species does not differ from typical *Podagrion*, which have long been known to live in the egg-cases of Mantis.

Perilampinæ.

PERILAMPUS TASMANICUS, sp.n.

Dark blue, largely tinged with violaceous, head with the violaceous tints more extended than they are on the thorax; a fiery red spot on the apex of the mesonotum on the sides, and another on the apex of the mesopleuræ above the middle; the ventral abdominal segments are lighter, more greenish in tint; apex of the second, and the apical dark red, the third green; legs dark blue to the apex of the femora, hind tibiæ almost black; knees, base and apex of tibiæ, and tarsi testaceous; wings hyaline, nervures dark fuscous; antennæ black, densely covered with white pile; the underside fuscous. ♀.Length, 3mm.

Hobart, Tasmania, (A. M. Lea).

Head somewhat strongly striated; striæ clearly defined, longitudinal on the vertex and front, roundly curved on the top of the former; occiput more closely and finely, transversely striated. Pro- and mesonotum and scutellum umbilically, rather strongly punctate, basal slope of the pronotum smooth; metanotum irregularly, obliquely striated. There is an oblique keel down the propleuræ before the middle, dividing the part into two, the basal (and smaller) irregularly striated, the apical smooth. Mesopleuræ with a quadrate, smooth depression, longer than wide, on the upper basal half

of the mesopleuræ; the rest longitudinally striated. Metapleuræ rugosely reticulated.

Eurytominae.

EURYTOMA BRACHYSCOLIDIS, sp.n.

Black, covered with whitish pubescence; trochanters, apex of femora, tibiæ and tarsi pale testaceous, oral region and almost the upper half of the propleuræ rufo-testaceous; base of antennal scape testaceous, underside of flagellum fuscous; the latter densely covered with a microscopic white pile; wings hyaline, nervures dark fuscous. The male has the face, clypeus, the lower outer orbits, and the malar space testaceous. ♂♀. Length, 1.5-2.5 mm.

Stawell, Victoria; bred from coccid (*Apiomorpha*) galls on *Eucalyptus* sp. (C. Daly).

Antennæ in ♀ short, thick, second joint twice longer than wide, becoming gradually widened towards the apex, scape distinctly narrower than it, the other joints wider than it is long, the last conical, the narrowed part of the joints in ♂ testaceous; the hairs are stiff, and longer than the joints. Marginal nervure as long as the postmarginal, and thicker than it; stigmal shorter than the latter, the lower thickened part semicircular, emitting a branch from the apical basal part. Parapsidal furrows shallow, but distinct. Abdomen smooth and shining, the apical segments fringed with white hair.

This is probably a variable species. The face in the ♀ may be broadly testaceous, the femora may be black, or black-testaceous below. The fourth abdominal segment occupies the greater part of the abdomen. The testaceous mark on the pronotum varies in size; it is not visible from above. The tarsi may be infuscated to a greater or less extent in the middle. There is no distinct club on the antennæ in ♀, all the joints being of equal width to the base of the last. The abdomen is distinctly shorter than the thorax; it is almost sessile, the petiole being very short.

EURYTOMA CLELANDI, sp.n.

Black; oral region, underside of antennal scape, lower half of the upper inner orbits broadly, outer orbits, the upper part gradually narrowed, malar space, mandibles, palpi and propleuræ entirely, rufo-testaceous; legs of a paler testaceous colour, the four anterior femora slightly, posterior broadly black above; wings hyaline, nervures black behind, testaceous in front; marginal vein distinctly longer and thicker than the postmarginal; the stigmal as long as the latter, its thickened apex obliquely narrowed from the base and apex to the centre, the two parts being of equal size; it has no projection. ♀.Length, 2 mm.

West Australia; bred from Coccid galls (*Apiomorpha* sp.) in January, (Dr. J. B. Cleland).

The second joint of the antennæ is longer than wide, and is distinctly narrower than the third, which is almost twice its length and distinctly wider than it; it is twice longer than wide; the other joints shorter, wider than long. The pubescence is white and dense; it is much longer on the metanotum. Head and thorax coriaceous, the pro- and mesonotum more or less transversely striated; the mesopleuræ finely, closely, obliquely striated; the metapleuræ much more coarsely striated. Parapsidal furrows straight, oblique, distinct. There is an aciculated line down the middle of the scutellum. The ventral surface of abdomen and the lower half of its sides are testaceous.

A coccid is a new host for the *Eurytomidæ*. They have been bred from *Hymenoptera*, *Coleoptera*, and *Diptera*, and one group feeds on the eggs of *Orthoptera*.

CHROMEURYTOMA, gen. nov.

Antennæ short, clavate, apparently 13-jointed, placed over the mouth, the last joints forming a club. Apex of clypeus rounded. Face roundly convex, clearly separated laterally, below separated from the clypeus by a furrow. Head distinctly wider than the thorax. Eyes large, widely separated

above, not converging. Temples short. Prothorax large, quadrate, as long as the mesothorax, which has distinct furrows; these are straight, and converge towards the apex. Scutellum large, longer than it is wide at the apex; that is, broadly rounded and margined. Postscutellum large, narrowed gradually behind. Metanotum short, little developed, the centre depressed narrowly, the sides broadly rounded, the slope oblique. There is an oblique furrow across the mesopleuræ. Abdomen shorter than thorax, longish-oval, distinctly narrowed at base and apex, not petiolated. Marginal nervure long, the postmarginal longer than it; stigmal fully one-half the length of the marginal. Legs stout, pilose. Body metallic-green; its sculpture fine.

I can refer this genus only to the *Eurytominae*, but it is certainly not typical of that group. The marginal nervure, for example, is much longer, the sculpture much finer, and the antennæ shorter and more clavate. I cannot place it in any other group. The metallic colour is not unique for the *Eurytominae*, for it is found in *Chryseida*. In habits, the type of the genus agrees with most *Eurytominae*, the species of the tribe being mostly parasitic on gall-insects. Probably the discovery of the male may throw light on the systematic position.

CHROMEURYTOMA CLAVICORNIS, sp.n.

Dark green, largely tinted with blue, and, to a less extent, with violaceous; antennæ, and legs, except the coxæ, rufo-testaceous; mandibles and palpi testaceous; wings hyaline, nervures pale testaceous. ♀.Length, 4.5 mm.

Bungendore, N.S.W.; bred from Eucalyptus galls; August, (W. W. Froggatt).

Vertex below the ocelli finely, closely striated; apex of pronotum, mesonotum and scutellum finely, closely striated, the striation stronger on the scutellum, weaker on the base of mesonotum; post-scutellum microscopically striated, the parts bordering it fiery-red, Metanotum smooth. Metapleuræ fiery-

red. Abdomen smooth. Apex of pronotum narrowly fiery-red. There is a wide curved furrow on the malar space. Ventral surface of abdomen largely violaceous.

I am not sure but that the deep rufous tint of the legs may be caused by discolouration through the action of cyanide of potassium.

XANTHEURYTOMA, gen. nov.

Submarginal nervure twice the length of marginal, thickened towards the apex, marginal thickened, postmarginal not one-half the length of marginal, not longer than stigmal, which is triangularly thickened at the base, at its junction with the marginal, the lower part of it narrowed, roundly curved. Antennæ short, thick, joints of flagellum wider than thick. Ocelli almost in a straight line, the central very little in front of the lateral. Parapsidal furrows clearly defined, rounded, meeting very shortly before the base of scutellum. Scutellum large, longish-pyriform, the broad end at the apex; almost as long as the mesonotum. Metanotum short, steeply oblique; the centre with a keel on either side, the two parallel not converging. Thorax not punctured, only very finely striated above. Abdomen sessile, distinctly shorter than thorax; its second segment much longer than the others; its apex bluntly rounded, broad; fifth segment shorter than fourth.

There is no clear club to the antennæ; the joints of the flagellum are not distinctly separated, at the most only pilose; the scape is narrower than the flagellum; it does not extend much above the middle of the eyes: there are eleven joints; the front is not much depressed.

Comes near to *Xanthoroma*, Ashm., which may be known from it by the fifth, abdominal segment in the ♀ being nearly twice as long as the fourth, by the abdomen being longer than the thorax, and by the marginal nervure being once and one-half longer than the stigmal, not twice longer. The parapsidal furrows are deeper, more clearly defined and

more roundly curved than in *Eurytoma*; the scutellum, too, is larger, and much more narrowed at the base than in that genus.

XANTHEURYTOMA FLAVA, sp.n.

Yellow; back of thorax deeper, more fulvous in tint; centre of the whole of the basal slope of pronotum and the thoracic sutures more or less black, flagellum of antennæ tinged with fulvous, legs a paler yellow than the body; wings hyaline, nervures testaceous, the dilated parts darker-coloured; stigmal nervure triangularly dilated at the base, the apical part a little longer than it, roundly curved. The metanotum and back of abdomen may be infuscated. ♂.Length, 2 mm.

Richmond, N.S.W.; bred from galls in the flowers of the Kurrajong (C. T. Musson).

Occiput transverse. Hinder ocelli separated from each other by twice the distance they are from the eyes. The occiput may be infuscated more or less; it is obscurely striated. Mesonotum and scutellum finely, closely, transversely striated. Parapsidal furrows distinct, roundly curved towards each other at the apex, where they unite and are joined to the transverse scutellar furrow by a short one. Scutellum large, ovate, twice longer than wide, obliquely narrowed to a point at the base, the apex broadly rounded.

Probably a variable species, as regards the amount of black.

Eupelminæ.

EUPELMUS ANTIPODA Ashmead.

Proc. Linn. Soc. N. S. Wales, 1900, 342.

Sydney; in September. Dorrigo; in September. Bred from egg-cases of a small Mantis.

This appears to be a variable species as regards colouration: some specimens have more of the green tint than others; the blue merges into violaceous, and these may be brassy tints. The male is green with brassy tints, and, on the metanotum,

the green merges into violaceous; the antennal scape and four front legs are yellow tinged with fulvous, especially on the femora; the hind legs are coloured as in the female, except that the femora are green for the greater part; and the tibiæ are not so deeply black, while their base may be testaceous. The colour of the wings varies, some having the fuscous tint on the apical two-thirds much lighter than others; in the males they may be almost hyaline.

Tridyminæ.

TEPPERELLA, gen.nov.

Antennæ short, stout, thickened towards the apex, apparently 12-jointed, the basal joint of the flagellum longer than broad, the apical shorter; head wider than the thorax: the temples little developed, occiput broadly incised. Ocelli in a curve, the hinder separated from each other by two-thirds the distance they are from the eyes. Clypeus triangular, longer than it is wide at the apex, which is transverse. Pronotum distinctly, but not largely developed, gradually widened towards the apex. Mesonotum with the furrows distinct, roundly curved; its middle lobe larger than the lateral, wide at the apex, which is bounded by a transverse furrow. Scutellum large, nearly as long as the mesonotum, gradually narrowed from the apex to the base, the apex bluntly transverse. Metanotum short, obliquely sloped. Abdomen broadly ovate, bluntly rounded at the apex, shorter than the thorax. Marginal nervure short, thick, about one-quarter longer than the stigmal branch; postmarginal thinner, and twice longer. Spurs short. Legs normal. There is a distinct longitudinal furrow near the top of the mesopleuræ, extending from base to apex.

Wings large, shortly ciliated round the apex. Malar space as long as the eyes. Apex of clypeus transverse. The front is little depressed. Top of antennal scape reaching close to the ocelli. Body smoother than usual, being almost without

sculpture. Scutellum larger than usual, somewhat pyriform, narrowed to a point at the base. Metathorax short; no keel on the metanotum.

I can refer this genus only to the *Tridymine*, Tribe *Tridymini*. In the system of Ashmead (Mem. Cair. Mus. i, 274) it runs near to *Semiotellus*.

TEPPERELLA MACULISCUTIS, sp.n.

Rufo-testaceous; head, except for a triangular spot on the face, the greater part of metanotum and the abdomen, black; antennæ black, flagellum testaceous below, scutellum with a longish-triangular black mark in the centre; wings clear hyaline, nervures testaceous. ♀.Length, 4 mm.

South Australia; bred from long, slender, horn-like galls on *Eucalyptus leucoxylon* (J. G. O. Tepper).

Smooth, shining; head, pronotum, metanotum, and apical abdominal segments sparsely haired.

Cleonyminæ.

PARAHEYDENIA, gen.nov.

Antennæ slender, not thickened towards apex. Front wings with a small cloud on the costal nervure at the base of its apical third; a larger cloud at, and touching the stigmal nervure; marginal nervures twice the length of stigmal; post-marginal thickened, and projecting beyond the apex of the latter. Occiput transverse, temples obsolete above. Ocelli in a triangle. Eyes large, parallel; malar space distinct. Pronotum a little longer than the mesonotum without the scutellum, the centre raised, widened towards the base, sides with a large, oval depression below the raised centre; it is distinctly narrower than the mesonotum, which is flat, narrowed in front and without furrows. Scutellum large, flat, wider than long, rounded at the base, the apex transverse; metanotum short, rounded, a keel running down the centre, and one on either side of this on the apical half; sides bor-

dered by a keel. First abdominal segment campanulate, longer than wide, the narrowed end at the base; second the longest, longer than the following united, the segments becoming gradually widened to the penultimate, the whole being shorter than the thorax. Fore-femora greatly swollen, straight on the lower, roundly, broadly narrowed on the upper side; base in front slightly depressed in the middle, middle femora more slender than the hinder, as are the middle tibiæ than the posterior. Second joint (pedicle) of the antennæ about twice longer than wide, third double its length, fourth about one-quarter shorter, the others shorter, fifth and sixth twice longer than wide, the others wider than long. Parapsidal furrows almost obsolete.

This genus fits in best into the *Cleonyminae*, and probably is most nearly related to *Heydenia*, a genus which appears to be very little known. It is stated by Foerster to resemble one of the *Dryinoideæ*, which is certainly the case with the present genus. In *Heydenia*, the parapsidal furrows are indicated; there are no keels on the metanotum nor clouds on the wings.

PARAHEYDENIA LONGICOLLIS, sp.n.

Upper part of head and thorax brassy-golden, sutures blue; pleuræ similarly coloured, but more largely tinged with blue, especially below; abdomen dark purple, the base blue, the middle laterally tinged with golden-brassy; legs dark red, four hinder coxæ purple, tarsi testaceous, basal joint white; antennal scape red, pedicle brassy, the other joints black; wings hyaline, nervures black, an oval fuscous cloud at the stigma. ♂.Length, 4 mm.

Wagga, N.S.W.; in April (W. W. Froggatt).

Antennal furrows wide, converging and uniting above, dark green, closely reticulated-punctured, as is also the vertex; the rest of the head more finely punctured. Ocelli in an equilateral triangle, the hinder separated from each other

by a slightly greater distance than they are from the eyes. Pronotum finely, closely transversely striated; pleuræ smooth. Mesonotum and scutellum closely, rather strongly, reticulated-punctured, the lateral divisions more finely than the central; mesopleuræ more finely, similarly punctured, more finely so at the base, where there is a raised longish area, the narrowed end above; apex bordered by a smooth line. Metanotum smooth in the middle; there is a stout keel down its centre, with a less distinct one, bulging out in the middle, on either side of it; the sides are aciculated, and as are also the metapleuræ, densely covered with white pubescence. Coxæ and the dilated fore-femora closely, finely punctured; the former densely covered with white pubescence. Mandibles red, black at the apex. Palpi white.